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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

Neil R. Cashman et al.

Art Unit:

1648

Serial No.:

09/602,775

Examiner:

Ulrike Winkler

Filed:

June 23, 2000

Customer No.:

21559

Title:

PRION PROTEIN PEPTIDES AND USES THEREOF

Mail Stop RCE Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Applicants submit the references listed on the enclosed Form PTO-1449, copies of which are enclosed. A copy of a search report from a corresponding international application is also enclosed

Submission of this statement is not a representation that a search has been made, nor is the inclusion of information in this statement an admission that the information is material to patentability.

Pursuant to 37 C.F.R. § 1.97(b)(4), this statement is being filed before the mailing of a first Office action after the filing of a Request for Continued Examination under 37

C.F.R. § 1.114. A check for \$180.00 in payment of the late submission fee set forth in 37 C.F.R. § 1.17(p) is enclosed.

If there are any other charges or any credits, please apply them to Deposit Account No. 03-2095.

Date: 22 February 2005

James D. DeCamp, Ph.D. Reg. No. 43,580

Respectfully submitted,

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U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE Attorney Docket No.

50111/002002

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09/602,775

INFORMATION DISCLOSURE

Applicant Filing Date Neil R. Cashman et al.

STATEMENT BY APPLICANT

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Group

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			U.S. PATENT DOCUMENTS			
Examiner's Initials	Document Number	Issue or Publication Date	Patentee or Applicant	Class	Subclass	Filing Date (If Appropriate)
	4,806,627	2/21/89	Wisniewski et al.			
	5,597,725	1/28/97	Suzuki			
	5,639,634	6/17/97	Suzuki			
	5,643,781	7/1/97	Suzuki			
	5,646,250	7/8/97	Suzuki			100
	5,663,300	9/2/97	Suzuki			
	5,679,530	10/21/97	Brentani et al.			
	5,708,143	1/13/98	Suzuki			
	5,798,224	8/25/98	Suzuki			
	5,891,706	4/6/99	Suzuki			
	6,150,172	11/21/00	Schmerr et al.			
	6,261,790 B1	07/17/01	O'Rourke			
	6,372,214 & X6	4/16/02	Prusiner et al.			
	6,462,171	10/8/02	Soto-Jara et al.			
·	FORE	GN PATENTS C	OR PUBLISHED FOREIGN PATENT	APPLICATIO	ONS	
Examiner's Initials	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation (Yes/No)
	SU 1529119 A1	12/15/89	Soviet Union			
	WO 87/06706	11/05/87	WIPO			
	WO 92/06220	4/16/92	WIPO			
-	WO 92/08731	5/29/92	WIPO			
	WO 94/01116	1/20/94	WIPO			

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	FOREIGN P	ATENTS OR P	UBLISHED FOREIGN PATENT AF	PLICATIO	ons	
	WO 96/32128	10/17/96	WIPO			
	WO 97/16728	5/9/97	WIPO			
**	WO 97/43649	11/20/97	WIPO			
1,077	WO 99/42829	08/26/99	WIPO			
	WO 00/78344 A1	12/28/00	WIPO			
	WO 01/00235	01/04/01	WIPO			
	WO 04/029072 A2	04/08/04	WIPO			
	OTHER DOCUMEN	ITS (INCLUDIN	IG AUTHOR, TITLE, DATE, PLACI	OF PUB	LICATION)	
В	acon and Anderson, "Mu	Itiple Sequence	Alignment," J. Mol. Biol. 191:153-	161 (1986)).	
В	ennett et al., "3D Domain	Swapping: A N	Mechanism for Oligomer Assembly,	" Protein S	Science 4:245	5-2468 (1995).
В	Bolton and Bendheim, "A Modified Host Protein Model of Scrapie," Ciba Found. Symp. 135:164-181 (1988).					
В	Bradley, "BSE Transmission Studies with Particular Reference to Blood," Dev. Biol. Stand. 99:35-40 (1999).					
В	Brown et al., "latrogenic Creutzfeldt-Jakob Disease at the Millennium," Neurology 55:1075-1081 (2000).					
В	Büeler et al., "Mice Devoid of PrP are Resistant to Scrapie," Cell 73:1339-1347 (1993).					
	Büeler et al., "Normal Development and Behaviour of Mice Lacking the Neuronal Cell-Surface PrP Protein," <i>Nature</i> 356:577-582 (1992).					
С	Cashman, "A Prion Primer," <i>CMAJ</i> 157:1381-1385 (1997).					
С	Cashman et al., "A Prion-Specific Immunological Epitope," Society for Neuroscience Abstracts 27:1743 (2001).					
	Cashman et al., "Cellular Isoform of the Scrapie Agent Protein Participates in Lymphocyte Activation," Cell 61:185-192 (1990).					
	Caughey et al., "Binding of the Protease-Sensitive Form of Prion Protein PrP to Sulfated Glycosaminoglycan and Congo Red," <i>J. Virol</i> 68: 2135-2141 (1994).					
С	Caughey, "Probing for Prions: Recognizing Misfolded PrP," Nature Medicine 9:819-820 (2003).					
1	Chandler, "Encephalopathy in Mice Produced by Inoculation with Scrapie Brain Material," Lancet 6:1378-1379 (1961).					
С	Collinge et al., "Prion Protein is Necessary for Normal Synaptic Function," Nature 370:295-297 (1994).				4).	

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DATE CONSIDERED

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SUBSTITUTE FORM PTO-1449

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

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Group

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(37 C.F.R. § 1.98(b))

IDS Filed

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OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PLACE OF PUBLICATION)
 Collinge, "Variant Creutzfeldt-Jakob Disease," Lancet 354:317-323 (1999).
Come et al., "A Kinetic Model for Amyloid Formation in the Prion Diseases: Importance of Seeding," <i>Proc. Natl. Acad. Sci. USA</i> 90: 5959-5963 (1993)
Coulthart and Cashman, "Variant Creutzfeldt-Jakob Disease: A Summary of Current Scientific Knowledge in Relation to Public Health," CMAJ 165:51-58 (2001).
Dayhoff et al., "A Model of Evolutionary Change in Proteins," Atlas Protein Sequence and Structure 5:345-352 (1978).
Eklund et al., "Pathogenesis of Scrapie Virus Infection in the Mouse," J. Infectious Disease 117:15-22 (1967).
Endo et al., "Diversity of Oligosaccharide Structures Linked to Asparagines of the Scrapie Prion Protein," <i>Biochem.</i> 28:8380-8388 (1989).
Engelman et al., "Identifying Nonpolar Transbilayer Helices in Amino Acid Sequences of Membrane Proteins," <i>Annu. Rev. Biophys. Biophys. Chem.</i> 15:321-353 (1986).
Field, "Slow Virus Infections of the Nervous System," Brit. J. Exp. Path. 8:129-239 (1969).
Fisher, "Vaccine in Mice Offers Hope in Fight Against Alzheimer's," <i>The New York Times, National</i> , pg. A16, July 8, (1999).
Gorochov et al., "Properties of a Disease Specific Prion Probe," Nature Medicine 10:11 (2004).
Horiuchi et al., "Inhibition of Interactions and Interconversions of Prion Protein Isoforms by Peptide Fragments from the C-terminal Folded Domain," <i>J. Biol. Chem.</i> 276: 15489-15497 (2001).
Houston et al., "Influence of Preformed α -helix and α -helix Induction on the Activity of Cationic Antimicrobial Peptides," <i>J. Peptide Res.</i> 52:81-88 (1998).
Houston et al., "Transmission of BSE by Blood Transfusion in Sheep," Lancet 356: 999-1000 (2000).
Kyte and Doolittle, "A Simple Method for Displaying the Hydropathic Character of a Protein," J. Mol. Biol. 157:105-132 (1982).
Li et al., "The Expression and Potential Function of Cellular Prion Protein in Human Lymphocytes," Cell. Immunol. 207:49-58 (2001).
McKinley et al., "A Protease-Resistant Protein Is a Structural Component of the Scrapie Prion," Cell 35:57-62 (1983).
Merrifield, "Solid Phase Peptide Synthesis. I. The Synthesis of a Tetrapeptide," J. Am. Chem. Soc. 85:2149-2154 (1963).
Moore et al., "Ataxia in Prion Protein (PrP)-Deficient Mice is Associated with Upregulation of the Novel PrP-Like Protein Doppel," <i>J. Mol. Biol.</i> 292:797-817 (1999).

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DATE CONSIDERED

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SUBSTITUTE FORM PTO-1449 (MODIFIED)

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(37 C.F.R. § 1.98(b))

IDS Filed

Group

Filing Date

February 22, 2005

OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PLACE OF PUBLICATION)
Morel et al., "Selective and Efficient Immunoprecipitation of the Disease-Associated Form of the Prion Protein can be Mediated by Nonspecific Interactions between Monoclonal Antibodies and Scrapie-Associated Fibrils," <i>J. Biol Chem.</i> 279: 30143-30149 (2004).
Morignat et al., "Targeted Surveillance to Assess the Prevalence of BSE in High-Risk Populations in Western France and the Associated Risk Factors," <i>Veterinary Record</i> 151:73-77 (2002).
Oesch et al., "Application of Prionics Western Blotting Procedure to Screen for BSE in Cattle Regularly Slaughtered at Swiss Abattoirs," <i>Arch. Virol. Supp.</i> 16:189-195 (2000).
Oesch et al., "A Cellular Gene Encodes Scrapie PrP 27-30 Protein," Cell 40:735-746 (1985).
O'Rourke et al., "Preclinical Detection of PrP ^{sc} in Nictitating Membrane Lymphoid Tissue of Sheep," <i>Veterinary Record</i> 142:489-491 (1998).
Paramithiotis et al., "Properties of a Disease Specific Prion Probe, Reply," Nature Medicine 10:11-12 (2004).
Pattison, "The Emergence of Bovine Spongiform Encephalopathy and Related Diseases," <i>Emerg Infect Dis</i> 4:390-394 (1998).
Prusiner, "Molecular Biology of Prion Diseases," Science 252:1515-1522 (1991).
Prusiner et al., "Ablation of the Prion Protein (PrP) Gene in Mice Prevents Scrapie and Facilitates Production of Anti- PrP Antibodies," <i>Proc. Natl. Acad. Sci., USA</i> 90:10608-10612 (1993).
Prusiner et al., "Further Purification and Characterization of Scrapie Prions," Biochem. 21:6942-6950 (1982).
Ricketts et al., "Is Creutzfeldt-Jakob Disease Transmitted in Blood," Emerg Infect Dis 3:155-163 (1997).
Schaller et al., "Validation of a Western Immunoblotting Procedure for Bovine PrPsc Detection and Its Use as a Rapid Surveillance Method for the Diagnosis of Bovine Spongiform Encephalopathy (BSE)," <i>Acta Neuropathol.</i> 98: 437-443 (1999).
Shyng et al., "Sulfated Glycans Stimulate Endocytosis of the Cellular Isoform of the Prion Protein, PrPc, in Cultured Cells," <i>Journal of Biological Chemistry</i> 270:30221-30229 (1995).
St. George-Hyslop et al., "Antibody Clears Senile Plaques," Nature 400:116-117 (1999).
Tam, "Recent Advances in Multiple Antigen Peptides," J. Immunol. Methods 196:17-32 (1996).
Tam, "Synthetic Peptide Vaccine Design: Synthesis and Properties of a High-Density Multiple Antigenic Peptide System," <i>Proc Natl. Acad. Sci., USA</i> 85: 5409-5413 (1988).
Tam and Zavala, "Multiple Antigen Peptide," J. Immunol. Methods 124:53-61 (1989).

EXAMINER

DATE CONSIDERED

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U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

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Group

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(37 C.F.R. § 1.98(b))

IDS Filed

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	OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PLACE OF PUBLICATION)
	Tam et al., "Membranolytic Selectivity of Cystine-Stabilized Cyclic Protegrins," Eur. J. Biochem. 267:3289-3300 (2000).
	Taylor et al., "Infectivity in the Blood of Mice with a BSE-Derived Agent," J. Hosp. Infect. 46:78-79 (2000).
	Tobler et al., "Sleep and Sleep Regulation in Normal and Prion Protein-Deficient Mice," J. Neuroscience 17:1869-1879 (1997).
	Vorberg et al., "A Novel Epitope for the Specific Detection of Exogenous Prion Proteins in Transgenic Mice and Transfected Murine Cell Lines," <i>Virology</i> 255:26-31 (1999).
	Will et al., "A New Variant of Creutzfeldt-Jakob Disease in the UK," Lancet 347:921-925 (1996).
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DATE CONSIDERED